

## **Remarks**

### **Specification**

The specification was objected to due to certain informalities which Applicant submits have been addressed by the amendment above.

### **Drawings**

The drawings were objected to due to certain informalities. Applicant encloses Replacement Sheets including the drawing sheets corresponding to Figures 3 – 7 after the proposed amendments to each of these figures are entered. These drawing sheets replace the originally filed drawing sheets.

### **Claims Status**

Claims 1-13 were originally filed in this application. In the Office Action dated June 18, 2008, claims 1-13 were rejected. Applicant has amended claim 1, 9 and 11 and added new claim 14. Support for the amendments can be found at least in the originally filed claims and throughout the application, such as at paragraph [0009] of the application as published. No new matter has been added.

### **Claim Objections**

Claim 9 was objected to because it cannot depend from itself.

Applicant respectfully submits that the claim amendment set forth above overcomes the Examiner's objections.

### **Claim Rejections**

Claims 1 and 10 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 14 respectively of U.S. Patent No. 7,365,864 to Gostein et al. ("Gostein").

Claims 1, 2, 6-9 and 10-13 were rejected under 35 U.S.C. §102(e) as being anticipated by Gostein.

Claims 3-5 were rejected under 35 U.S.C. §103(a) as being obvious over Gostein in view of U.S. Patent No. 5,812,261 to Nelson ("Nelson").

Applicant respectfully submits that, for the reasons set forth below, the claim amendments set forth above overcome these rejections.

### **Double Patenting**

Claims 1 and 10 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 14 respectively of Gostein. Applicant respectfully traverses the rejections, as applied to these claims, as amended, and reserve all rights associated therewith. Nevertheless, to address all issues in the Office action and place claims 1 and 10 in condition for allowance, Applicant submits herewith a terminal disclaimer in compliance with 37 C.F.R. § 1.321(c), disclaiming over U.S. Patent No. 7,365,864. A fee transmittal form and check are enclosed to cover the requisite fee.

### **Claim Rejections Under 35 U.S.C. §102(e) and §103(a)**

Independent claim 1, as amended, recites a method for measuring a film, comprising, *inter alia*, generating a spatially periodic refractive index disturbance in a gas or liquid medium contacting the film, diffracting a probe laser beam off the refractive index disturbances in the medium, and detecting the resulting signal beam as a function of time to generate a signal waveform having an ISTS component and a component caused by the refractive index disturbances. Importantly, the amended claim requires determining at least one property of the film based on the component of the signal waveform caused by the refractive index disturbances.

Gostein does not base his measurement on refractive index disturbances; indeed, the reference makes no mention of this phenomenon. Rather, Gostein utilizes the thermal component of the signal waveform generated using ISTS. (col. 2, ln. 20-25; col. 5, lines 52-60). Accordingly, Gostein does not even discuss the physical basis for Applicant's measurements, much less their use as claimed.

The Examiner argues that the claimed technique would be practiced "inherently" using the method disclosed in Gostein. In particular, the examiner contends that "generating a spatially periodic refractive index disturbance in a gas or liquid medium contacting the film," and "diffracting a probe laser beam off the refractive index disturbances in the said medium to form a

signal beam" would occur as an unavoidable consequence of the method described in the Gostein patent, because the beam would heat the film and cause the disturbances.

Whether or not this is so, claim 1, as amended, requires basing the measurement on the refractive index disturbances, which Gostein does not contemplate, and not on the ISTS component that Gostein does utilize. Accordingly, whether refractive index disturbances may be inherently generated using the technique described in Gostein is irrelevant to the present claims, since their use, as claimed, is neither disclosed nor suggested.

Nelson does not provide what Gostein lacks. Briefly, Nelson describes a method for determining the thickness of opaque and transparent films by comparing the measured phase velocities or frequencies of acoustic waveguide modes. (Abstract.) Nelson does not teach or suggest measurement based on refractive index disturbances and not an ISTS component, as recited in independent claim 1, as amended.

Thus, neither Gostein or Nelson, alone or in combination, fulfills the requirements of independent claim 1 as amended. Accordingly, Applicant respectfully submits that independent claim 1, as amended, as well as those claims that depend therefrom, are now patentable over the cited reference and in condition for allowance.

**Conclusion**

Applicant respectfully submits that, in light of the foregoing amendments and remarks, claims 1-14 are in condition for allowance, and requests that the application proceed to issue. If, in the Examiner's opinion, a telephonic interview would expedite the favorable prosecution of the present application, the undersigned attorney would welcome the opportunity to discuss any outstanding issues and to work with the Examiner toward placing the application in condition for allowance.

Respectfully submitted,

Date: September 18, 2008

Tel. No.: (617) 570-1241  
Fax No.: (617) 523-1231

/Steven J. Frank/  
Steven J. Frank, Reg. No. 33,497  
Attorney for Applicant  
Customer No. 051414  
Goodwin | Procter LLP  
Exchange Place  
53 State Street  
Boston, Massachusetts 02109

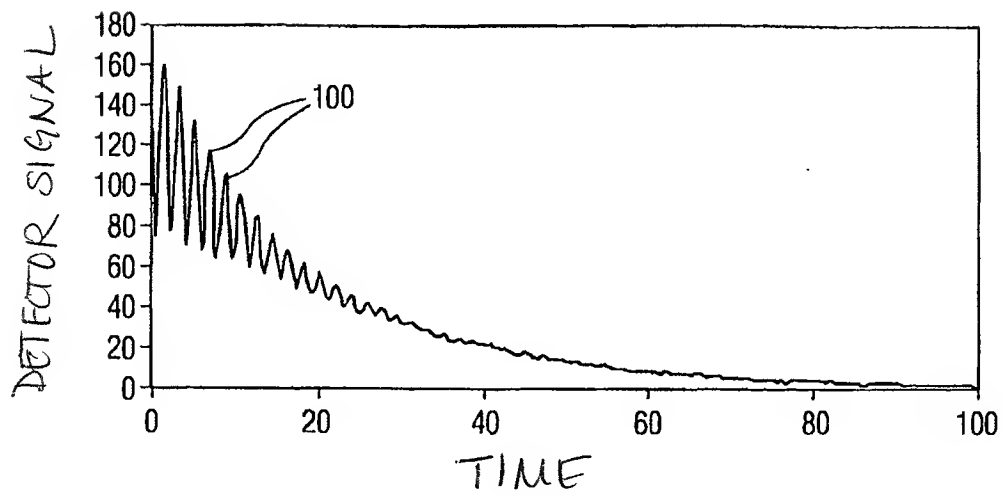


FIG. 3

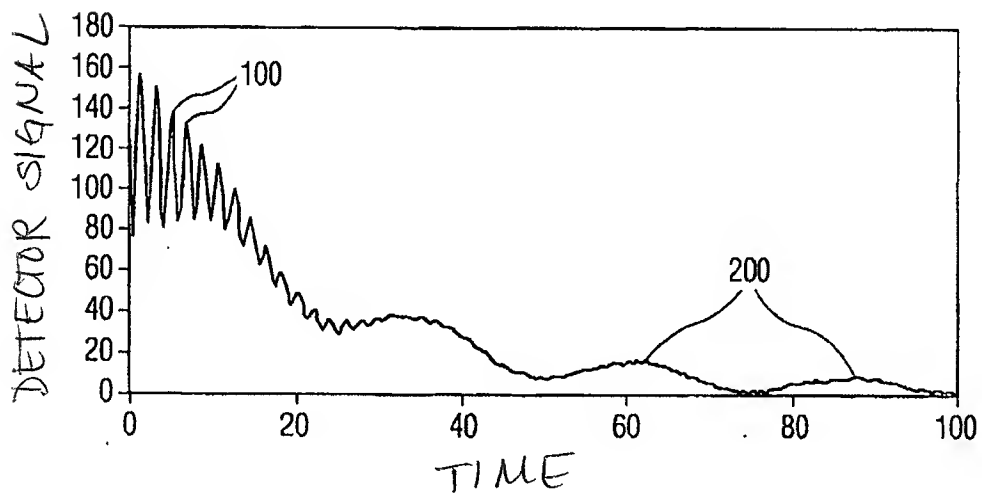
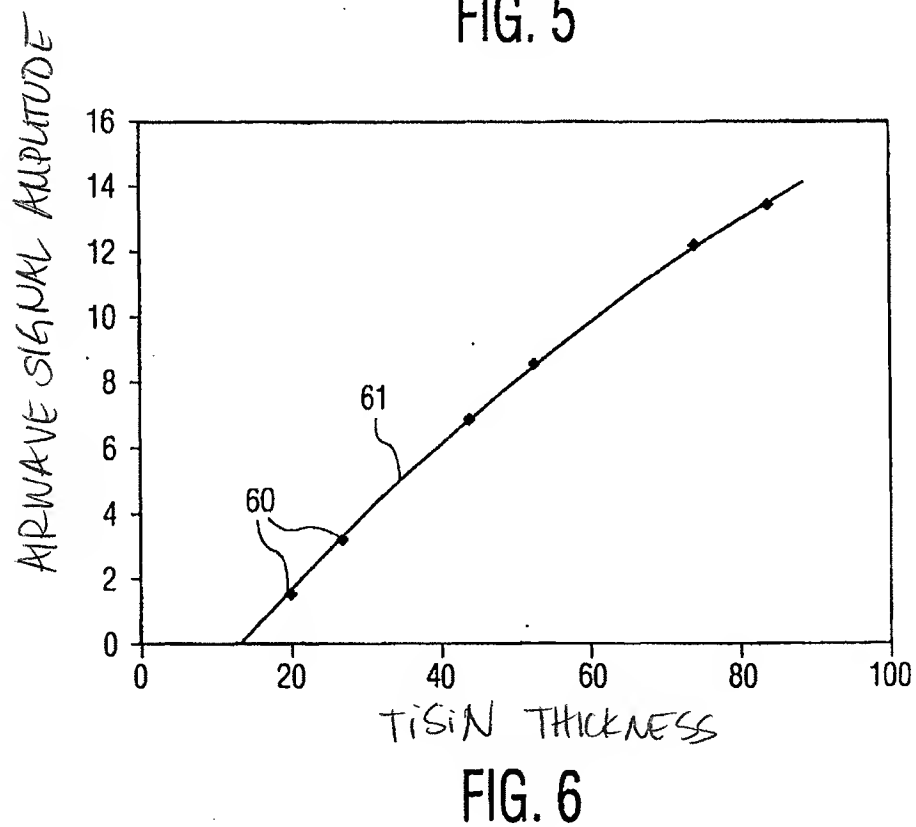
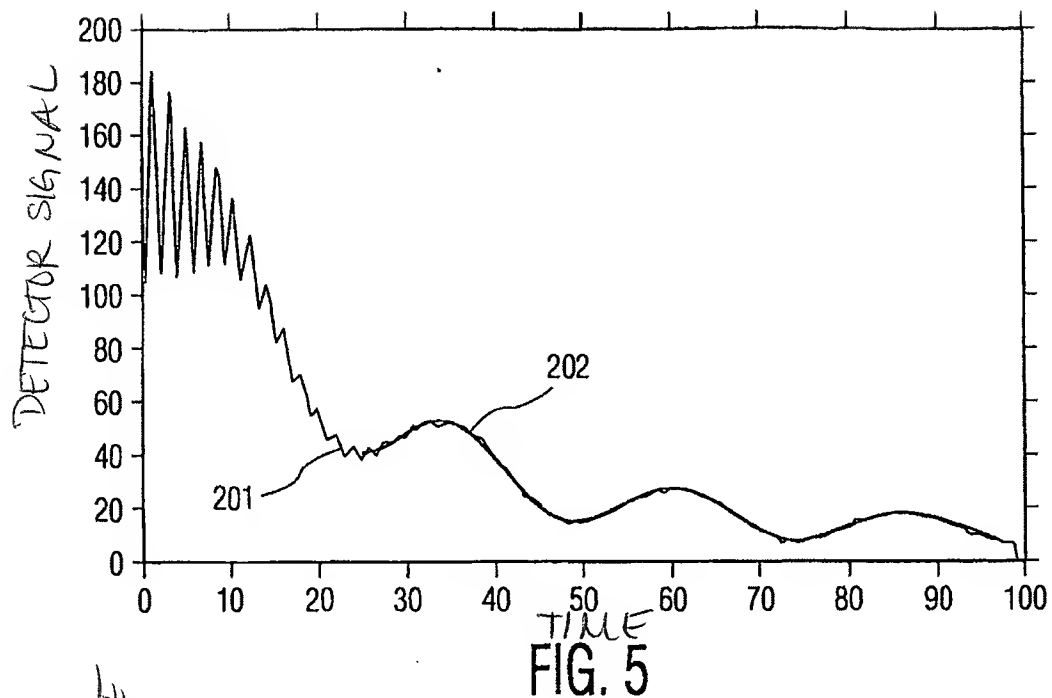


FIG. 4



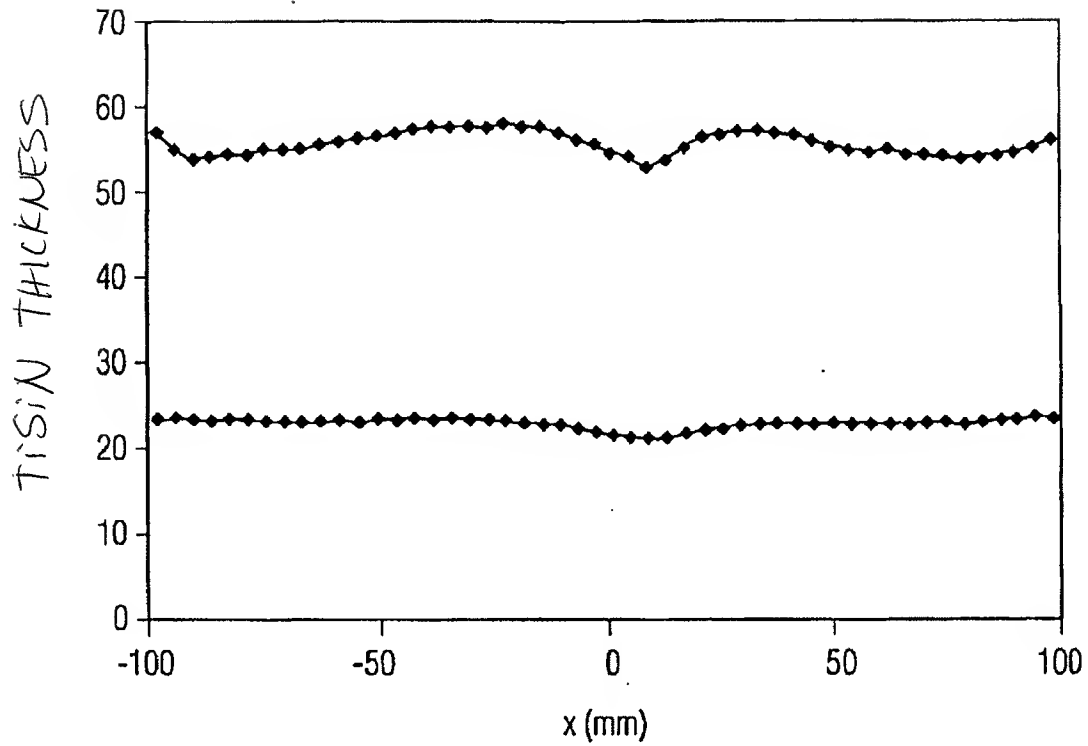


FIG. 7